

EXHIBIT 9

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK**

In re Barrick Gold Securities Litigation)	
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)	Case No. 1:13-CV-03851
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REPORT OF PROFESSOR ALLEN FERRELL

November 13, 2015

I. Qualifications

1. I am an economist and the Greenfield Professor of Securities Law at Harvard Law School, where I have taught since 1998. I received a Ph.D. in economics from the Massachusetts Institute of Technology with fields in econometrics and finance and a J.D. from Harvard Law School. My Ph.D. thesis concerned the relationship between stock prices and financial disclosures. After law school I clerked for Judge Silberman of the United States Court of Appeals for the D.C. Circuit and Justice Kennedy of the Supreme Court of the United States.

2. I am also a faculty associate at the Kennedy School of Government at Harvard, a fellow at Columbia University's Program on the Law and Economics of Capital Markets, a research associate at the European Corporate Governance Institute, and a member of the editorial board of the *Journal of Financial Perspectives*. I formerly was a member of the Board of Economic Advisors to the Financial Industry Regulatory Authority ("FINRA"), an academic fellow at FINRA, Chairperson of Harvard's Advisory Committee on Shareholder Responsibility (which is responsible for advising the Harvard Corporation on how to vote shares held by its endowment), the ABA Task Force on Corporate Governance, American Law Institute Project on the Application of U.S. Financial Regulations to Foreign Firms and Cross-Border Transactions, and an executive member of the American Law School section on securities regulation.

3. I have testified before the U.S. Senate Subcommittee on Securities, Insurance and Investment and presented to, among others, the U.S. Securities and Exchange Commission (“SEC”), the World Bank, International Monetary Fund, the Structured Products Association and the National Bureau of Economic Research. I have published approximately thirty articles in leading journals in the general area of law and finance, including on the use of event studies and the estimation of price impact in securities litigation. I have also been an expert witness in a number of securities cases. My testimony in the last four years and academic work are summarized on my curriculum vitae, which is attached hereto as Exhibit A.

4. I am being compensated at my customary hourly rate of \$1,050 per hour for my work on this matter. My compensation is not contingent on the outcome of this matter. I have received the assistance of the staff employed by Compass Lexecon.

II. Introduction and Summary of Conclusion

5. As of 2009, Barrick Gold Corp. (“Barrick” or the “Company”) was the world’s largest gold mining company and operated mines or projects in Canada, the United States, Dominican Republic, Australia, Papua New Guinea, Peru, Chile, Argentina, Pakistan and Tanzania. Barrick Form 40-F for the Fiscal Year Ended December 31, 2009, Exhibit 99.1, at 11. Barrick’s “principal products and sources of earnings are gold and copper.” *Id.* Following the receipt of the necessary

permits and resolution of outstanding issues with the governments of Chile and Argentina, Barrick announced on May 7, 2009 that it would begin construction on its Pascua-Lama project, “one of the world’s best undeveloped gold mining projects,” which was expected to be one of the lowest cost gold producing mines in the world. Barrick Press Release, May 7, 2009.

6. Union Asset Management Holding AG and LRI Invest S.A. (“Lead Plaintiffs”) allege that from May 7, 2009 through November 1, 2013 (the “Class Period”), “the Company’s [internal] controls were ineffective, rendering any statements concerning the cost, timetables, or valuation of the [Pascua-Lama] Project inaccurate and unreliable.” Consolidated Amended Class Action Complaint (“Complaint”) ¶ 9. Lead Plaintiffs also allege that during this period, “Defendants knowingly breached the explicit terms” of “regulatory environmental requirements” governing the Pascua-Lama project. *Id.* ¶ 5.

7. Lead Plaintiffs claim that Barrick and the other Defendants¹ “engaged in a course of conduct that artificially inflated the trading price of Barrick’s common stock by making materially incomplete, false and misleading statements and

1. The other Defendants are Aaron W. Regent (Barrick’s CEO throughout the Class Period until June 6, 2012), Jamie C. Sokalsky (Barrick’s CEO since June 6, 2012), Ammar Al-Joundi (Barrick’s Executive Vice President and CFO since July 10, 2012), Peter Kinver (Barrick’s COO from January 1, 2004 to May 2, 2012 and Barrick’s Executive Vice President from September 9, 2012 to May 2, 2012), Igor Gonzales (Barrick’s CEO from May 2, 2012 to the second quarter of 2013), George Potter (Barrick’s Senior Vice President of Technical Services & Capital Projects from 2008 to October 2011), and Sybil E. Veenman (Barrick’s Senior Vice President and General Counsel from June 2010 through the end of the Class Period). Complaint ¶¶ 22-29.

omissions” regarding the Pascua-Lama project throughout the Class Period. *Id.* ¶¶ 19-20 & 207. Lead Plaintiffs further allege that “as a result of their purchases of Barrick common stock at artificially inflated prices during the Class Period, [they] and other members of the Class suffered a substantial economic loss (*i.e.*, damages under the federal securities laws) as the truth was revealed.” *Id.* ¶ 209.

8. Among the dates on which Lead Plaintiffs allege that “the truth was revealed” is May 24, 2013, when “Chile’s Environmental Superintendent ... issued a resolution suspending the Pascua-Lama Project pending compliance with an environmental permit, and imposing a fine equivalent to \$16 million-the maximum penalty possible under Chilean law.” *Id.* ¶ 137. Lead Plaintiffs claim that in response to this news, “Barrick’s stock price dropped from \$19.55 on May 23 [2013] to \$19.16 on May 24 [2013].” *Id.* ¶ 140.

9. I have been asked by counsel for the Defendants to analyze whether the price decline on May 24, 2013 can be used to measure damages. Based on my review and analysis of the materials listed in Exhibit B, I have concluded that Barrick’s price decline on May 24, 2013 cannot be used to measure damages. I provide the bases for this conclusion in the remainder of this report.

III. Barrick’s Price Decline on May 24, 2013 Cannot Be Used to Measure Damages

10. To determine whether information impacted the price of a stock that is traded in an efficient market, an economist first must assess whether, at the same

time as the information disclosure, a price change net of market and industry factors occurred of a sufficient magnitude to be considered statistically significant. If the firm-specific price change cannot be considered statistically significant, the price change cannot be attributed to the information disclosure because there is too high a likelihood that the change is attributable to random chance alone. Accordingly, if a purported corrective disclosure or materialization of a concealed risk is not associated with a statistically significant firm-specific price decrease, then there is no reliable economic basis to associate the price decline on the date of the disclosure with the alleged misrepresentation.

11. In securities litigation, event studies are commonly used in assessing the price impact of an alleged corrective disclosure or materialization of a concealed risk. An event study is a regression analysis that measures the effect of an event, such as a firm's earnings announcement, on a firm's stock price. In such an analysis, one controls for factors other than the event under investigation that also may have affected the stock price in part by using a market model that can account for contemporaneous market and industry movements. The estimation of the market model quantifies the extent to which the firm's stock price moves with the general market and factors affecting its industry. The resulting firm-specific price

changes are referred to as “residual returns.”² The statistical significance of a residual return is typically assessed by calculating a standardized measure of the size of the residual return known as a “t-statistic.”³

12. In support of their motion for class certification, Lead Plaintiffs have submitted the Expert Report of Chad Coffman, CFA dated September 15, 2015 (the “Coffman Report”), in which Mr. Coffman presents an event study analysis. Coffman Report ¶ 51. I reviewed and replicated the market model Mr. Coffman used in his event study analysis.^{4,5} Specifically, he used the S&P 500 Total Return Index to control for the effects of overall market factors on Barrick’s stock price changes, and a portfolio of certain members of the S&P/TSX Gold Mining Index, as well as the gold spot price, to control for the effects of industry-related factors.⁶ Coffman Report ¶ 52 & n.63. For each event he analyzed, he estimated the

2. See, e.g., J.Y. Campbell, A.W. Lo, & A.C. MacKinlay, *The Econometrics of Financial Markets*, (Princeton University Press, 1997), at 160-66; A.C. MacKinlay, “Event Studies in Economics and Finance,” 35 *Journal of Economic Literature* (March 1997), 13-39; G.W. Schwert, “Using Financial Data to Measure Effects of Regulation,” 24 *Journal of Law and Economics* (1981), 121-57; D.R. Fischel, “Use of Modern Finance Theory in Securities Fraud Cases Involving Actively Traded Securities,” 38 *The Business Lawyer* (1982), 1-20, at 19.

3. See, e.g., W. Mendenhall, J.E. Reinmuth & R.J. Beaver, *Statistics for Management and Economics* (Duxbury Press, 1993), at 346-47.

4. I compared the results of my replication to Mr. Coffman’s results and found that they are substantially similar.

5. I use Mr. Coffman’s event study solely to test whether his analysis supports or contradicts Lead Plaintiffs’ claims regarding the price impact of the May 24, 2013 announcement. I reserve the right to perform my own event study and rely on it to test Lead Plaintiffs’ claims independent of Mr. Coffman’s analysis.

6. I use Mr. Coffman’s market and industry factors to proxy the effects of the overall market and the gold mining industry on Barrick’s stock price. I reserve the right to choose my own market and industry factors and rely on them for this and any other analysis in the future.

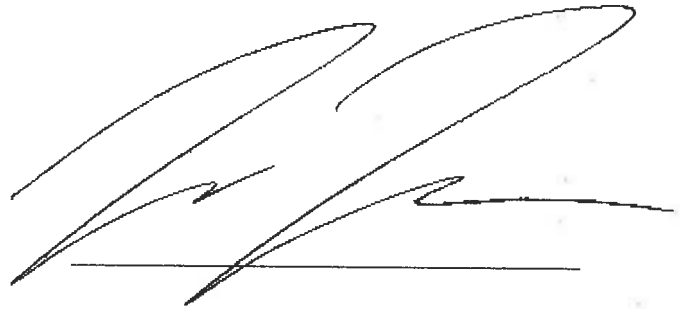
relationship between Barrick's stock price changes and these factors over the prior 120 days.⁷ *Id.* ¶ 53.

13. Mr. Coffman uses the critical t-statistic value of +/-1.96 to determine whether a residual return is statistically significant at the 95 percent confidence level, *i.e.*, the t-statistic must be 1.96 or greater, or -1.96 or below; otherwise, random chance as the explanation for the residual return cannot be rejected.⁸ Coffman Report ¶ 56. Accordingly, the t-statistic for the residual return on May 24, 2013 must be 1.96 or greater, or -1.96 or below, to be considered statistically significant. Mr. Coffman did not state in his report whether the decline in Barrick's stock price on May 24, 2013 was statistically significant.

14. Employing Mr. Coffman's model, I find that the residual return on May 24, 2013 is -0.83% with a t-statistic of only -0.67, *i.e.*, well below the significance threshold. *See* Exhibit C. Consequently, based on Mr. Coffman's own model to analyze the statistical significance of Barrick's stock price changes, the residual return on May 24, 2013 cannot be used to measure damages.

7. Mr. Coffman uses "dummy variables" to remove the price effects of certain days from the estimation period, including alleged corrective disclosures or materializations of concealed risks, earnings announcements, and a date when gold declined to a two-year low. Coffman Report Exhibit 7 n.1. Based on Mr. Coffman's description of his analysis, the dates I dummied out during the 120 days prior to May 24, 2013 are February 14, 2013, April 10, 2013, April 15, 2013 and April 24, 2013.

8. Mr. Coffman and I both use the 95 percent confidence level as the threshold for statistical significance.

A handwritten signature in black ink, consisting of stylized, overlapping loops and a horizontal line at the bottom.

Allen Ferrell

November 13, 2015